ADJUSTMENT INSTRUCTION

1. Application Object

These instructions are applied to all of the MODELS of LCD MONITOR, MF-02HA.

2. Notes

(1) Because this is not a hot chassis, it is not necessary to use an isolation transformer. However, the use of isolation transformer will help protect test instrument.
(2) Adjustment must be done in the correct order. But, it can be changed in consideration of mass production.
(3) The adjustment must be performed in the circumstance of 25±5°C of temperature and 65±10% of relative humidity if there is no specific designation.
(4) The input voltage of the receiver must keep 100-240V, 50/60Hz in adjusting.

※ Input voltage is possible from 85V to 260V because the power voltage applied to this chassis is Wide-Range. But, adjustment should be operated in 100-240V, 50/60Hz if there is no specific designation.

(5) The receiver must be operated for about 15 minutes prior to the adjustment.
- After receiving 100% white pattern(06CH), the receiver must be operate prior to adjustment.(Or white condition in HEAT-RUN mode)

- Enter into HEAT-RUN mode
  - Select HEAT RUN OFF by pressing ADJ button on Remote Control for adjustment.
  - Press the VOL + button in HEAT-RUN OFF. (OSD displays HEAT-RUN WHITE and screen displays 100% full WHITE PATTERN)
  - ※ Set is activated HEAT-RUN without signal generator in this mode.
  - ※ Single color pattern of HEAT-RUN mode can be used to check PANEL.(RED/BLUE/GREEN)

[Caution] *If you turn on a still screen more than 20 minutes (especially, Digital pattern[13 CH], Cross Hatch Pattern[09CH]), a afterinage may be occur in the black level part of the screen.*

3. Adjustment Items

3-1. Whole Assembly Adjustment

(1) White Balance Adjustment
(2) SUB-BRIGHT Adjustment : Sub-Bright adjustment in LCD panel is not necessary. Do not adjust sub-bright if there is no specific designation.
(3) RGB CUT-OFF Adjustment : Under examination about auto adjustment which correspond to the new Rembrandt-1A.

3-2. EDID (The Extended Display Identification Data) Adjustment

(1) This is the function that is made for the realization of “Plug and Play” which makes possible to use the user environment right after reorganization by communicating with monitor automatically.

(2) EDID DATA for DVI of MF-02HA

EDID table =

	00	01	02	03	04	05	06	07	08	09
000	00	FF	FF	FF	FF	FF	FF	00	1E	6D
010	D7	3A	01	01	01	01	33	0B	01	01
020	81	40	26	96	08	B7	FB	A1	56	48
030	98	24	13	48	4B	AF	EF	00	81	00
040	31	59	45	59	61	59	81	80	71	4F
050	01	01	01	01	BC	34	00	98	51	00
060	2A	40	10	90	13	00	40	26	00	00
070	00	1E	00	00	00	FC	00	4D	57	20
080	33	30	4C	5A	31	30	0A	20	20	20
090	00	00	00	FD	00	3C	78	1F	5B	10
100	00	0A	20	20	20	20	20	20	D5	09
110	80	A0	20	E0	2D	10	10	60	A2	00
120	EE	F0	75	00	00	18	00	BD		

(3) EDID DATA for RGB of MF-02HA

EDID table =

	00	01	02	03	04	05	06	07	08	09
000	00	FF	FF	FF	FF	FF	FF	00	1E	6D
010	D7	3A	01	01	01	01	33	0B	01	01
020	1E	40	26	96	08	B7	FB	A1	56	48
030	98	24	13	48	4B	AF	EF	00	81	00
040	31	59	45	59	61	59	81	80	71	4F
050	01	01	01	01	BC	34	00	98	51	00
060	2A	40	10	90	13	00	40	26	00	00
070	00	1E	00	00	00	FC	00	4D	57	20
080	33	30	4C	5A	31	30	0A	20	20	20
090	00	00	00	FD	00	3C	78	1F	5B	10
100	00	0A	20	20	20	20	20	20	D5	09
110	80	A0	20	E0	2D	10	10	60	A2	00
120	EE	F0	75	00	00	18	00	BD		

(4) Refer to Service Manual related to EDID communication.

4. Whole Assembly Adjustment

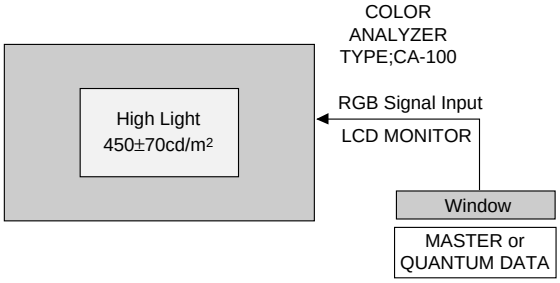
<Caution> Each PCB Assy must be checked by Check JIG Set before assemling.(Be careful about power PCB ASSY which can give a fatal damage to the LCD Module)

4-1. White Balance Adjustment

(1) Required Equipment

Color analyzer(CA-100 or same production)

(2) Connection Diagram of Equipment for Measuring (Automatic Adjustment)



(Fig. 1) Connection Diagram of Automatic Adjustment

Connect RS-232C to Adjustment Equipment and SET.
Automatization operating room has in charge of managing and repairing about adjusting equipment.
Only adjust HIGH LIGHT and RGB input adjusts R-GAIN/G-GAIN/B-GAIN automatically.
Automatic adjustment equipment decides the values of R-GAIN/G-GAIN/B-GAIN by correcting color coordinates/white balance and transmits them into SET and finally the SET saves data values.

(3) White Balance Adjustment(Manual Adjustment)

- Operate Zero Calibration of CA-100 and Sensor must be stick completely to the surface of LCD module
- Devide Manual adjustment into AV/PC and operate adjustment by the following sequence.
- Manual adjustment is a temporary method when automatic adjustment is not correspondent.

1. AV W/B adjustment

1) Select WHITE PATTERN of HEAT RUN mode by pressing ADJ button on Remote Control for adjustment then operate HEAT RUN more than 15 minute
2) Supply pattern signal for WB adjustment in pattern generator. (AV INPUT)
3) Low Light has no special adjustment.
4) To adjust High Light, stick sensor to 2th pattern(White), select and adjust the AV GAIN by pressing INSTSRT button on Remote Control for adjustment.
After select the R GAIN and G GAIN, enter Adjustment Mode by pressing ENTER button and press the VOL +/- Key and adjust it until color coordination becomes (B GAIN is fixed)
color coordination : X=0.283±0.003, Y=0.296±0.003
color temperature : 9,350°K ± 500°K

5) Exit adjustment mode using Enter button.

2. PC W/B Adjustment

1) Select WHITE PATTERN of HEAT RUN mode by pressing ADJ button on Remote Control for adjustment then operate HEAT RUN more than 15 minute.
2) Supply pattern signal for WB adjustment in pattern generator.(RGB1 INPUT)
3) Low Light has no special adjustment.
4) To adjust High Light, stick sensor to 2th pattern(White), select and adjust the PC GAIN by pressing INSTSRT button on Remote Control for adjustment.
After select the R GAIN and G GAIN, enter Adjustment Mode by pressing ENTER button and press the VOL +/- Key and adjust it until color coordination becomes (B GAIN is fixed)
color coordination : X=0.283±0.003, Y=0.296±0.003
color temperature : 9,350°K ± 500°K

(R Gain is used to adjust X-coordinates while adjusting and X-coordinates could be shortened when R Gain is increased.
G Gain is used to adjust Y-coordinates while adjusting andY-coordinates could be shortened when G Gain is increased.)

5) Exit adjustment mode using Enter button.

3. Component (480p~1080i) Offset Adjustment

- Use this adjustment when the Grayscale out of Ch13. Pattern has red or blue while producing set.
- This adjustment is used to remove the declination of YPbPr Offset in AD9888.

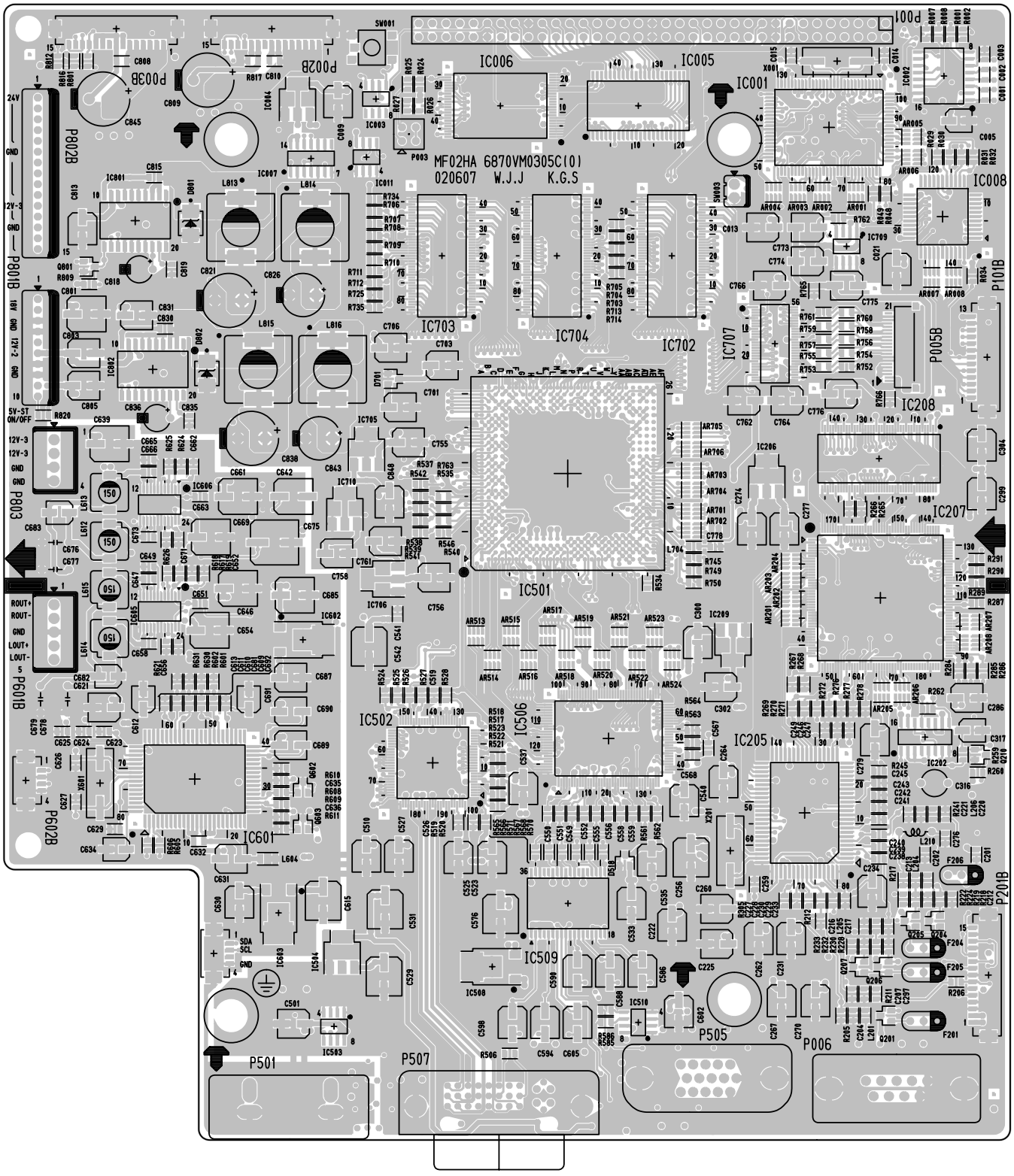
1) Operate the adjustment after PC/AV White Balance adjustment progress.
2) Select Ch.14 after connect DTV STB to Component (480p~1080i) terminal and AV terminal.
3) When you press ADJ button twice on the R/C for adjustment, the SET goes to DWI condition and Main Window(right side)/Sub Window(left side) are set to AV mode.
4) In this condition, adjust R with ‘DTV R OFFSET’ and B with ‘DTV B OFFSET’ based on ‘foundation color(Gray)’ of Ch.14.
5) Exit adjustment mode using Enter button.

TROUBLESHOOTING

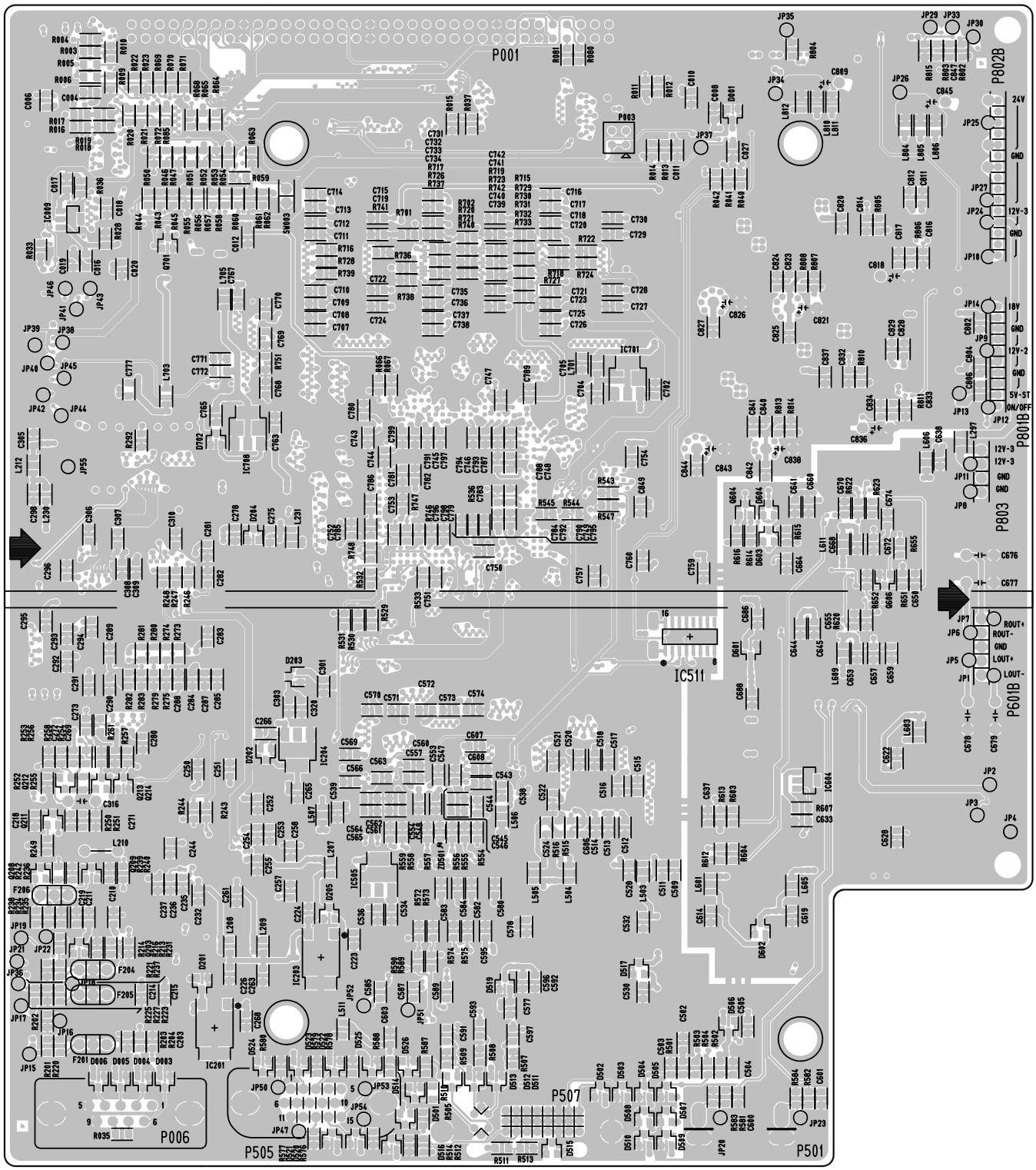
Symptom	Cause	Check Point
1. No power from all outputs	1) Fuse open 2) Error of rectying circuit/EMI Filter	1) Check BD801, Q801, Q802, Q804 2) Check BD801, L801, L802, TH800, TH801
2. No power from +24V/+12V /+18V	1) Short of output terminal 2) Input error of parts 3) Error of U902 and peripheral circuits. 4) Error of T803	1) Check the second side parts and Pattern short 2) Check reverse input of PH801, D916, CR802 3) Check R941~R944 when the Pin Bias power no7. of U902 is abnormal. (normal: 15V~25V) - Replace U902(FAN7554) parts - Check the error of Q804 4) Replace T803
3. No power from +18V	1) Short of output terminal 2) Input error of parts 3) Error of U802 and peripheral circuits.	1) Check the peripheral parts of 18V and Pattern short. 2) Check reverse input of D916(SB560) 3) No Input of L812 when both terminal voltage of C830 are low. (normal voltage: +24V) - Replace U802(PQ1CG203) parts when there is no error.
4. No power from +5VS	1) Short of output terminal 2) Input error of parts 3) Error of U903 and peripheral circuits. 4) Error of T802	1) Check the peripheral parts of 5VS and Pattern short. 2) Check reverse input of D802, CR801 3) Check R937~R939 when the Pin Bias power no7. of U903 is abnormal. (normal: 15V~25V) - Replace U903(FAN7554) parts - Check the error of Q802 4) Replace T802
5. No power from +24V/+12V /+18V in 110VAC Input	1) Drop of output power due to the error of PFC circuit. 2) Error of T801	1) Replace U901(MC33368D) when there is no error in the peripheral parts. - Check the error of Q801 2) Replace T801

PRINTED CIRCUIT BOARD

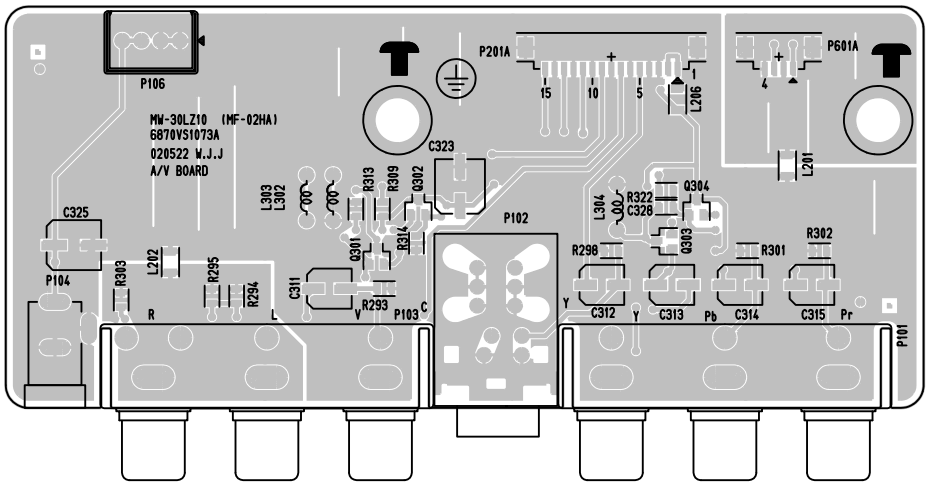
MAIN(TOP)



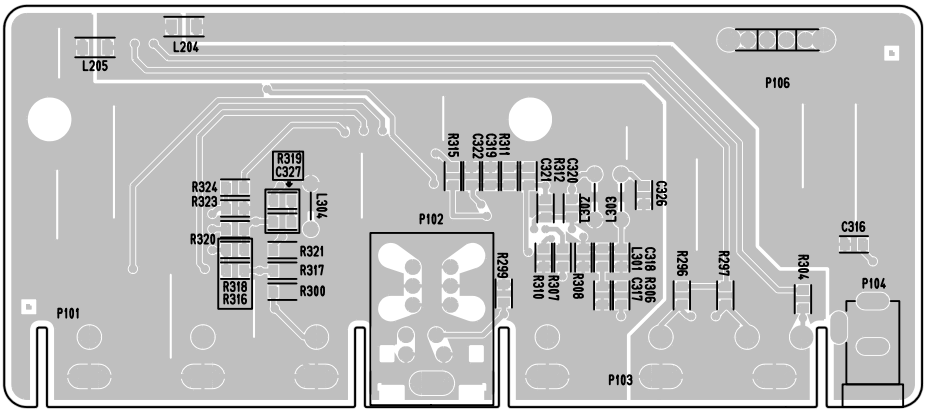
MAIN(BOTTOM)


P001
P802B
P801B
P803
P601B
P006
P505
P507
P501
IC511
IC701
24V
GND
12V-3
18V
12V-2
5V-ST
ON/OFF
ROUT+
ROUT-
LOUT+
LOUT-

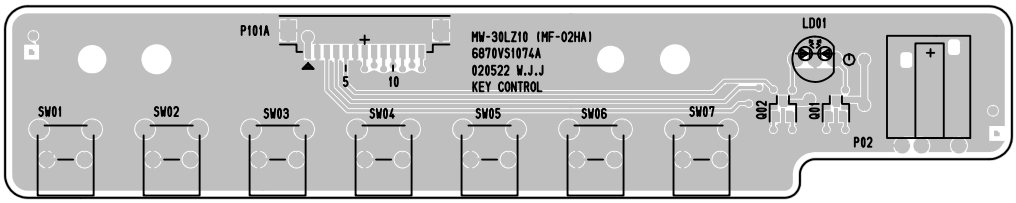
SIDE A/V(TOP)



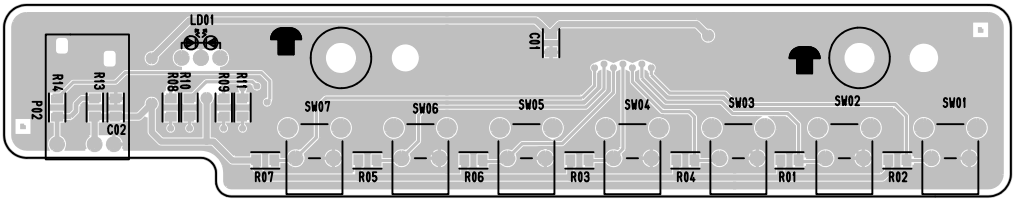
SIDE A/V(BOTTOM)



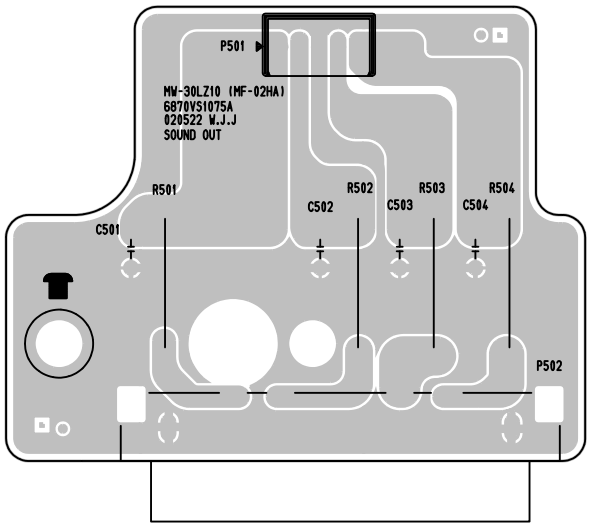
CONTROL(TOP)



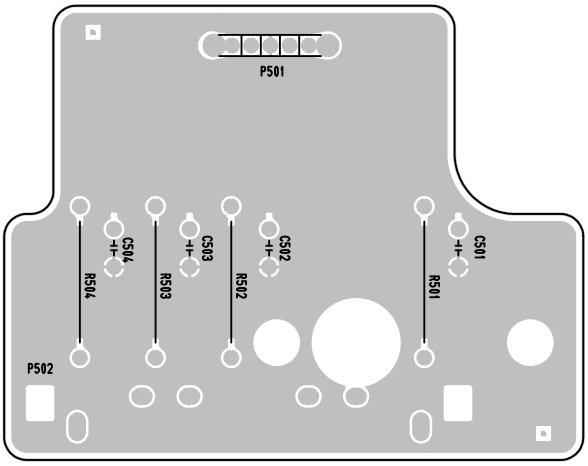
CONTROL(BOTTOM)



POWER(TOP)

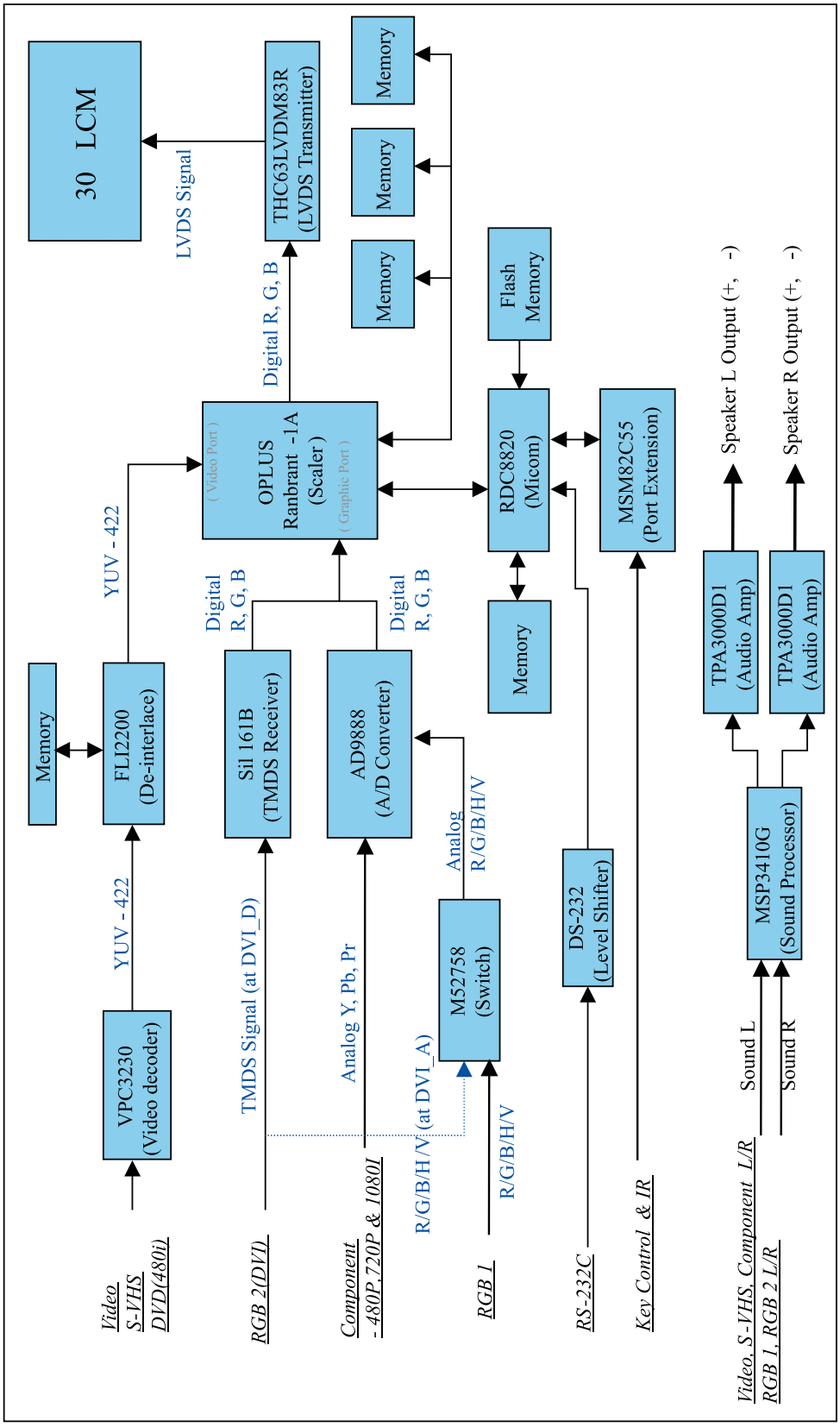


POWER(BOTTOM)

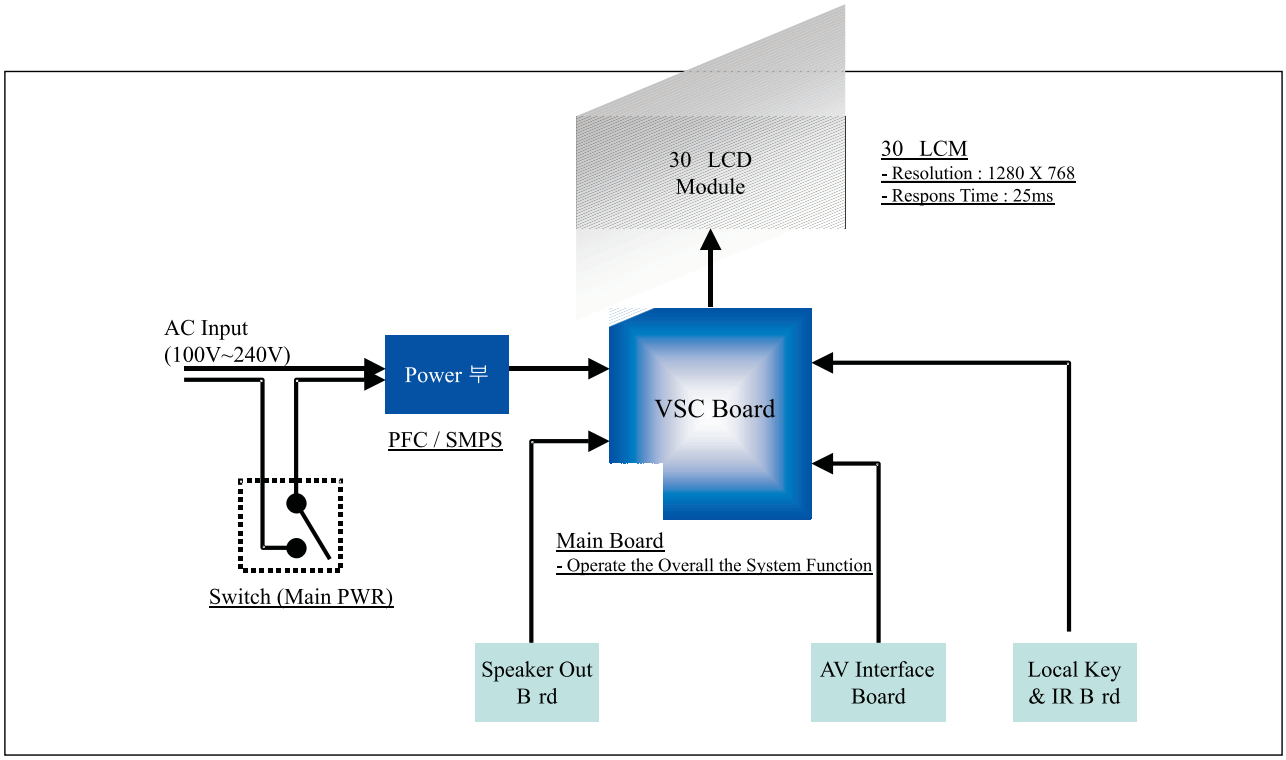


BLOCK DIAGRAM

1. VSC Board



2. System Block Diagram & Function



2-1. Input Source Ranges

(1) Input Paths
: CVBS, S-Video, Component (480i, 480p, 720p, 1080i), RGB 1, RGB 2, RS-232C

(2) Video System Recognition (Multi-system ; Refer to Product Specification)
: NTSC M, NTSC 4.43, PAL, PAL M, PAL N, PAL 4.43, SECAM

(3) RGB 1 Mode Compatibility
: Up to SXGA 75Hz (See Compatibility Table in Product Specification in detail.)

(4) RGB 2 Mode Compatibility
: Up to SXGA 60Hz (See Compatibility Table in Product Specification in detail.)

2-2. Video Controls

(1) RGB Video Controls
: Contrast, Brightness, Color Red, Color Green, Color Blue, User Setting Reset
: Clock, Phase, Auto Tracking (Automatic Clock & Phase Optimization)

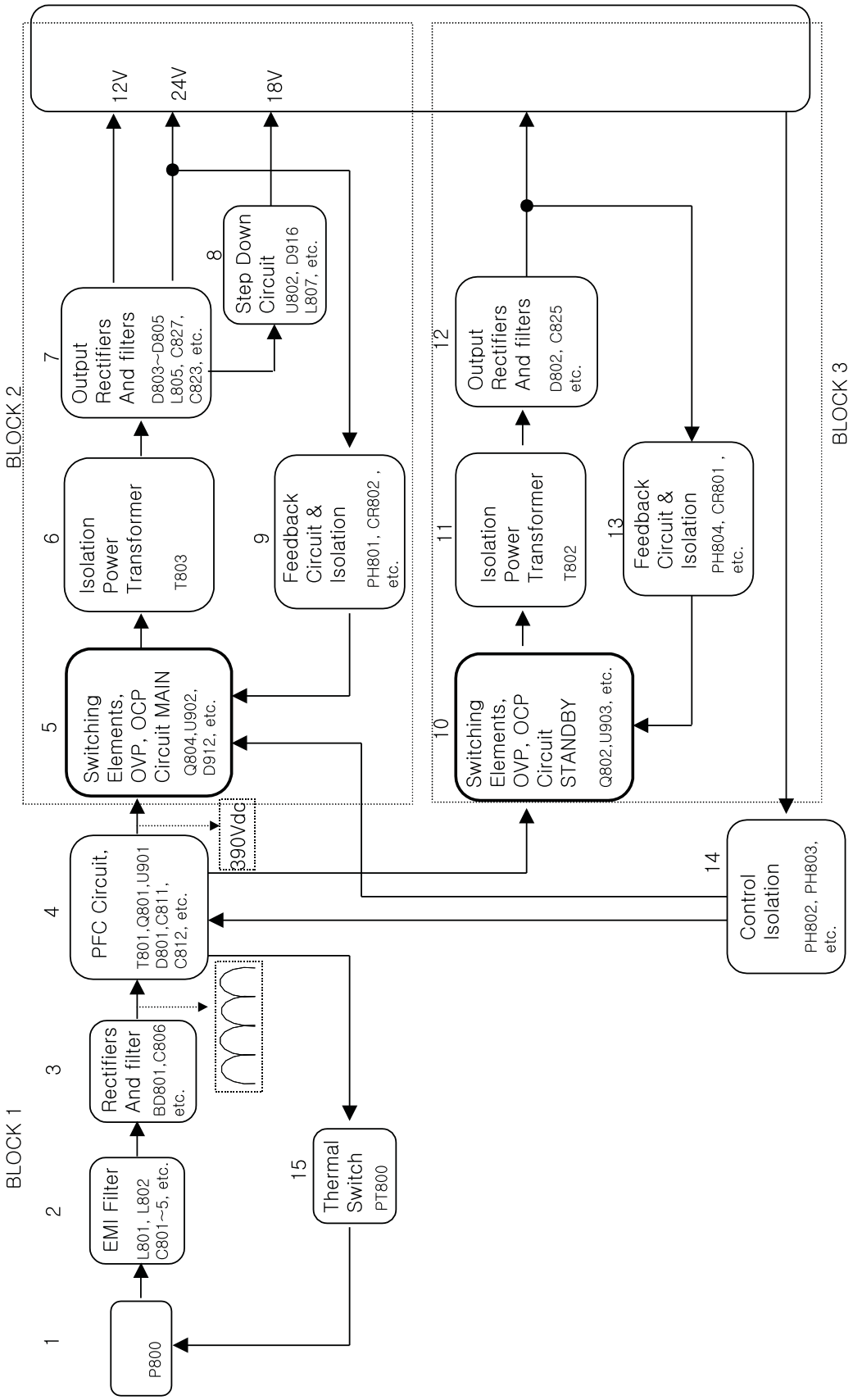
(2) AV Video Controls (AV1, AV2, S-Video, Component 1, Component 2)
: Contrast, Brightness, Color Level(Saturation), Tint(Hue), Sharpness, User Setting Reset

¡ See the OSD Spec. for more detail information of video controls.

2-3. Audio Controls

(1) Volume, Treble, Bass, Balance Control
(2) Sound Mute

3. Power


BLOCK 1
BLOCK 2
BLOCK 3
1
P800
2
EMI Filter
L801, L802
C801~5, etc.
3
Rectifiers
And filter
BD801,C806
etc.
4
PFC Circuit,
T801,Q801,U901
D801,C811,
C812, etc.
390Vdc
5
Switching
Elements,
OVP, OCP
Circuit MAIN
Q804,U902,
D912, etc.
6
Isolation
Power
Transformer
T803
7
Output
Rectifiers
And filters
D803~D805
L805, C827,
C823, etc.
8
Step Down
Circuit
U802, D916
L807, etc.
9
Feedback
Circuit &
Isolation
PH801, CR802 ,
etc.
10
Switching
Elements,
OVP, OCP
Circuit
STANDBY
Q802,U903, etc.
11
Isolation
Power
Transformer
T802
12
Output
Rectifiers
And filters
D802, C825
etc.
13
Feedback
Circuit &
Isolation
PH804, CR801 ,
etc.
14
Control
Isolation
PH802, PH803,
etc.
15
Thermal
Switch
PT800
12V
24V
18V

3-1. Explanation of Circuit Movement

If the AC Input voltage(1) is confirmed to power device, this Input voltage is adjusted as DC wave form through EMI FILTER(2) and the first adjusting part(3). This adjusted wave form is input to PFC(4, Power Factor Correction) and makes the PFC circuit works and the output voltage(+390Vdc) by PFC circuit becomes a Main Input voltage of MAIN(5), STANBY(10) Switching part.

Input voltage is input to Switching part(5, 10) and make this High voltage DC voltage(390Vdc) to be a High Voltage spherical wave with high frequency through the Switching by the elements such as FET, PWM IC.

To keep the secondary adjusted voltage to be regular and safe in changing Input voltage and Output load, the output voltage is watched and feedback to switching part(5, 10) through the control circuit(9).

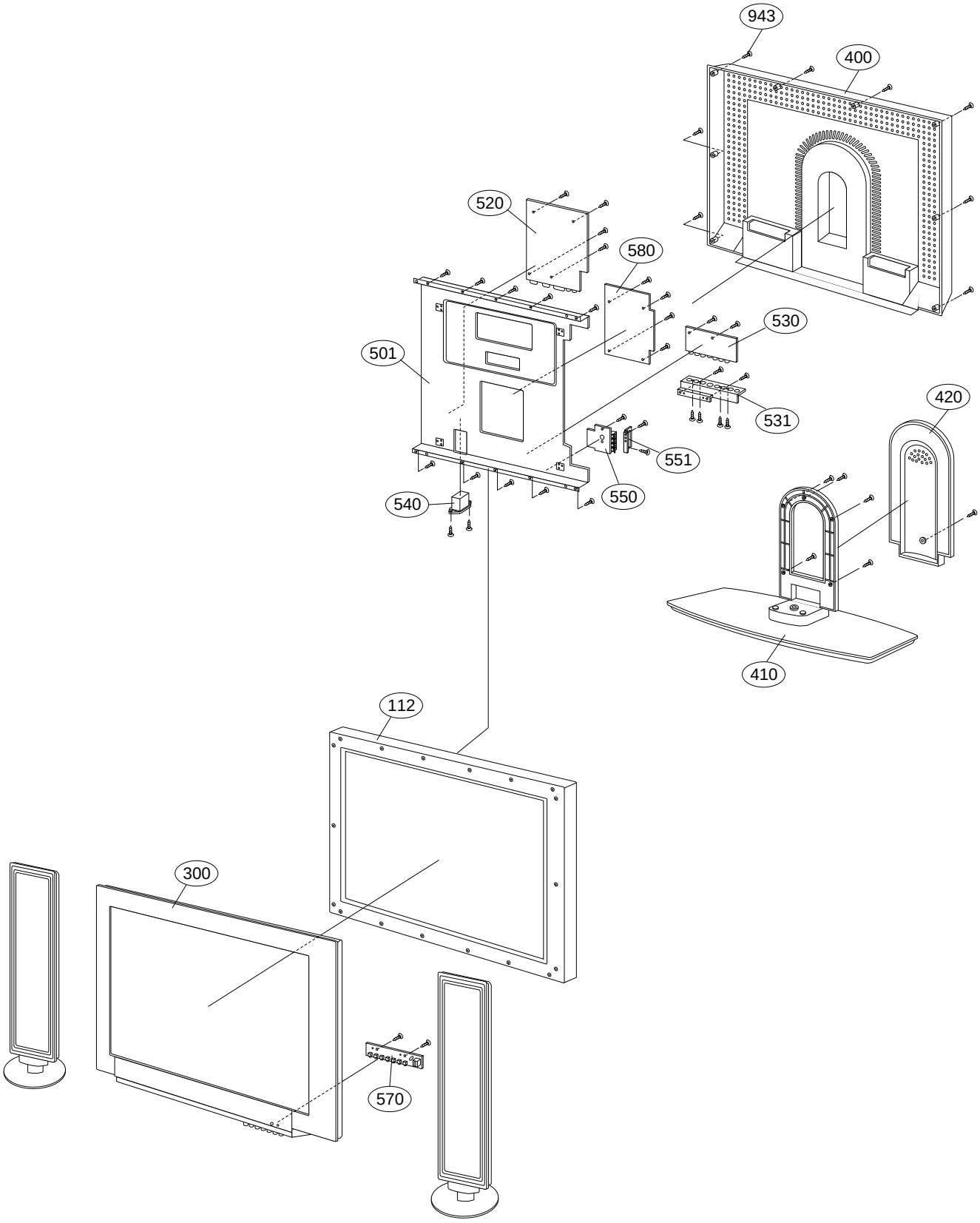
BLOCK 2 works as Forward converter method by receiving Input of BLOCK 1 and supplies MAIN DC(+24V, +12V) voltage and the Step Down circuit(8) supplies +18V.

Also, BLOCK 3 works as Flyback converter method by receiving Input of BLOCK 1 and supplies +5V for Stanby.

Protection circuit is built in switching part(5, 10) to protect over electric-current, short, over voltage of the secondary output. This circuit protects the output and stick the Terminal Switch(15) to radiator while PFC and protect a fire or other accident by turning the AC voltage off while overheating.

To minimize power consumption, if the OFF signal is transmitted to PFC part(4), Main part(5) through the control circuit connected from Main board to Power board, only the +5V circuit for Standby works and others are OFF.

EXPLODED VIEW



EXPLODED VIEW PARTS LIST

No.	PART NO.	DESCRIPTION
112	6305V00001A	LCD ASSEMBLY,30” LCD PANEL LC30W01-A3 AND I
300	3091V00A73B	CABINET ASSEMBLY
400	3809V00A33B	BACK COVER ASSEMBLY
410	3501V00083A	BOARD ASSEMBLY,BASE MW-30LZ10
420	3508V00306A	DECO,REAR COVER
501	4980V00505B	SUPPORTER ASSY,MODULE
520	6871VMN648A	PCB ASSEMBLY,MAIN MF-02HA MW-30LZ10 MAIN BO
530	6871VSN182B	PCB ASSEMBLY,SUB A/V MF-02HA MW-30LZ10 AV BOARD
531	4930V00226E	HOLDER,AV
540	3141VPN048A	CHASSIS ASSEMBLY,SMPS MF-02HA LCD30 SWITCH
550	6871VSN181A	PCB ASSEMBLY,SUB SPK MF-02HA MW-30LZ10 SPK BOAR
551	4930V00224C	HOLDER,SPK JACK
560	6633VA0004A	INVERTER ASSEMBLY,24VOLT 1100VOLT K.S. KLS300W1
570	6871VSN180A	PCB ASSEMBLY,SUB CONT MF-02HA MW-30LZ10 CONTROL
580	3501V00091A	BOARD ASSEMBLY,SMPS PFC MW-30LZ10 MF-02HA LCD
943	1FBF0403122	SCREW,D4.0 L16.0

REPLACEMENT PARTS LIST

RUN DATE : 2002.8.24

LOCA. NO	PART NO	DESCRIPTION
IC		
IC001	0IMCRRS001A	R8820LV RDC SEMICONDUCTOR LTD
IC002	0IDS232000A	DS232AS 16P,SOP TP RS-232 DRIV
IC003	0IDS170800A	DS1708S 8P SOIC ST MICROMONITO
IC004	0ISJ111733A	EZ1117CST-3.3 3P,SOT-223 TP 3.
IC005	0IMMRSS064A	K6R4016V1C-TC10 SAMSUNG ELECTR
IC006	0IMMRMR006A	MX29LV160TTC-70 MACRONIX 48P T
IC007	0IPH748600D	74HC86 SOIC-14 TP QUAD 2-INPUT
IC008	0IOK825522A	MSM82C55A-2GS-2K 44P QFP ST CM
IC009	0IKE704200J	KIA7042AF SOT-89 TP 4.2V VOLTA
IC011	0IAL241610A	AT24C16N-10SI 8P SOIC ST EEPRO
IC201	0IMCRFA008A	KA78M05RTM, FAIRCHILD 2P D-PAK
IC202	0IFA741230A	DM74LS123MX 16SOP TP DUAL RETR
IC203	0IMCRFA008A	KA78M05RTM, FAIRCHILD 2P D-PAK
IC204	0ISJ111733A	EZ1117CST-3.3 3P,SOT-223 TP 3.
IC205	0IIT323000E	VPC3230D C5 80P QFP
IC206	0IPRPML001A	MIC39100 MICREL 3P SOT223 R/TP
IC207	0IMCRG2001A	FLI2200 SAGE 176P,QFP TRAY VID
IC208	0ISS464323A	K4S643232E(C)-TC/L60(70) (KM43
IC209	0ISJ111733A	EZ1117CST-3.3 3P,SOT-223 TP 3.
IC501	0IMCROT001A	REMBRANT-1A OPLUS TECHNOLOGIES
IC502	0IMCRS5002A	SIL161BCT RX SILICON IMAGE 100
IC503	0IAL242110A	AT24C21-10SI-2.5 8P,SOP TP 1K
IC504	0ISJ111733A	EZ1117CST-3.3 3P,SOT-223 TP 3.
IC505	0ISJ111733A	EZ1117CST-3.3 3P,SOT-223 TP 3.
IC506	0IMCRAD003A	AD9888KS-140 ANALOG DEVICE 128
IC508	0IMCRFA008A	KA78M05RTM, FAIRCHILD 2P D-PAK
IC509	0IMCRMI006A	M52758FP MITSUBISHI 36PIN, R/T
IC510	0IAL242110A	AT24C21-10SI-2.5 8P,SOP TP 1K
IC511	0IMCRTI001A	SN74HCT157D TEXAS INSTRUMENT 1
IC601	0IMCRMN011D	MSP3410G QA B8 V3 MICRONAS 80P
IC602	0IMCRFA009A	KA78M08RTM, FAIRCHILD 2P D-PAK
IC603	0IMCRFA008A	KA78M05RTM, FAIRCHILD 2P D-PAK
IC604	0IKE704200J	KIA7042AF SOT-89 TP 4.2V VOLTA
IC605	0IMCRTI015A	TPA3000D1 TEXAS INSTRUMENT 24P
IC606	0IMCRTI015A	TPA3000D1 TEXAS INSTRUMENT 24P
IC701	0ISJ111733A	EZ1117CST-3.3 3P,SOT-223 TP 3.
IC702	0ISS464323A	K4S643232E(C)-TC/L60(70) (KM43
IC703	0ISS464323A	K4S643232E(C)-TC/L60(70) (KM43
IC704	0ISS464323A	K4S643232E(C)-TC/L60(70) (KM43
IC705	0IMCRSJ001A	SC1565IST-1.8 SEMTECH 3P SOT22
IC706	0ISJ111733A	EZ1117CST-3.3 3P,SOT-223 TP 3.
IC707	0IMCRTH001A	THC63LVDM83R THINE ELECTRONICS
IC708	0ISJ111733A	EZ1117CST-3.3 3P,SOT-223 TP 3.
IC710	0ISJ111733A	EZ1117CST-3.3 3P,SOT-223 TP 3.
IC801	0IMCRSG003A	L4973D5.1 SGS-THOMSON 20P SOP

LOCA. NO	PART NO	DESCRIPTION
IC802	0IMCRSG003A	L4973D5.1 SGS-THOMSON 20P SOP
TRANSISTOR		
IC709	0TF492509AA	FET,SI4925DY TP TEMIC 30V 6.1A SO
Q01	0TR387500AA	CHIP 2SC3875S(ALY) KEC
Q02	0TR387500AA	CHIP 2SC3875S(ALY) KEC
Q201	0TR387500AA	CHIP 2SC3875S(ALY) KEC
Q203	0TR387500AA	CHIP 2SC3875S(ALY) KEC
Q204	0TR387500AA	CHIP 2SC3875S(ALY) KEC
Q205	0TR387500AA	CHIP 2SC3875S(ALY) KEC
Q206	0TR387500AA	CHIP 2SC3875S(ALY) KEC
Q207	0TR387500AA	CHIP 2SC3875S(ALY) KEC
Q208	0TR387500AA	CHIP 2SC3875S(ALY) KEC
Q209	0TR387500AA	CHIP 2SC3875S(ALY) KEC
Q210	0TR102009AG	CHIP KRC102S SOT-23 TP KEC
Q211	0TR387500AA	CHIP 2SC3875S(ALY) KEC
Q212	0TR387500AA	CHIP 2SC3875S(ALY) KEC
Q213	0TR150400BA	CHIP 2SA1504S(ASY) KEC
Q214	0TR387500AA	CHIP 2SC3875S(ALY) KEC
Q301	0TR150400BA	CHIP 2SA1504S(ASY) KEC
Q302	0TR387500AA	CHIP 2SC3875S(ALY) KEC
Q303	0TR150400BA	CHIP 2SA1504S(ASY) KEC
Q304	0TR387500AA	CHIP 2SC3875S(ALY) KEC
Q602	0TR150400BA	CHIP 2SA1504S(ASY) KEC
Q603	0TR150400BA	CHIP 2SA1504S(ASY) KEC
Q604	0TR150400BA	CHIP 2SA1504S(ASY) KEC
Q606	0TR387500AA	CHIP 2SC3875S(ALY) KEC
Q701	0TR102009AG	CHIP KRC102S SOT-23 TP KEC
Q801	0TR102009AG	CHIP KRC102S SOT-23 TP KEC
DIODE		
D001	0DD226239AA	CHIP KDS226 SOT-23
D003	0DD226239AA	CHIP KDS226 SOT-23
D004	0DD226239AA	CHIP KDS226 SOT-23
D005	0DD226239AA	CHIP KDS226 SOT-23
D006	0DD226239AA	CHIP KDS226 SOT-23
D201	0DD226239AA	CHIP KDS226 SOT-23
D202	0DD226239AA	CHIP KDS226 SOT-23
D203	0DD226239AA	CHIP KDS226 SOT-23
D204	0DD226239AA	CHIP KDS226 SOT-23
D205	0DD226239AA	CHIP KDS226 SOT-23
D501	0DD226239AA	CHIP KDS226 SOT-23
D502	0DD226239AA	CHIP KDS226 SOT-23
D503	0DD226239AA	CHIP KDS226 SOT-23
D504	0DD226239AA	CHIP KDS226 SOT-23
D505	0DD226239AA	CHIP KDS226 SOT-23
D506	0DD184009AA	KDS184S CHIP 85V 300MA KEC TP
D507	0DD226239AA	CHIP KDS226 SOT-23
D508	0DD226239AA	CHIP KDS226 SOT-23

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LOCA. NO	PART NO	DESCRIPTION
D509	0DD226239AA	CHIP KDS226 SOT-23
D510	0DD226239AA	CHIP KDS226 SOT-23
D511	0DD226239AA	CHIP KDS226 SOT-23
D512	0DD226239AA	CHIP KDS226 SOT-23
D513	0DD226239AA	CHIP KDS226 SOT-23
D514	0DD226239AA	CHIP KDS226 SOT-23
D515	0DD226239AA	CHIP KDS226 SOT-23
D516	0DD226239AA	CHIP KDS226 SOT-23
D517	0DD226239AA	CHIP KDS226 SOT-23
D518	0DD226239AA	CHIP KDS226 SOT-23
D519	0DD226239AA	CHIP KDS226 SOT-23
D520	0DD226239AA	CHIP KDS226 SOT-23
D521	0DD226239AA	CHIP KDS226 SOT-23
D522	0DD226239AA	CHIP KDS226 SOT-23
D523	0DD226239AA	CHIP KDS226 SOT-23
D524	0DD226239AA	CHIP KDS226 SOT-23
D525	0DD226239AA	CHIP KDS226 SOT-23
D526	0DD226239AA	CHIP KDS226 SOT-23
D601	0DD226239AA	CHIP KDS226 SOT-23
D602	0DD226239AA	CHIP KDS226 SOT-23
D603	0DD181009AB	KDS181 TP KEC - 85V - - - 300M
D604	0DD181009AB	KDS181 TP KEC - 85V - - - 300M
D701	0DD226239AA	CHIP KDS226 SOT-23
D702	0DD226239AA	CHIP KDS226 SOT-23
D801	0DR190309AA	MBRS190T3 TP MOTOROLA - 90V 1A
D802	0DR190309AA	MBRS190T3 TP MOTOROLA - 90V 1A
LD01	0DL200000CA	LED,SAM5670(DL-2LRG) BK Y-GREEN -
ZD501	0DZRM00178A	ZENERS,UDZS TE-17 5.1B
CAPACITOR		
C005	0CE106SF6DC	10UF MVG 16V 20% R/TP(SMD) SMD
C009	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C013	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C016	0CK224DF56A	220000PF 2012 16V 10% R/TP X7R
C021	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C222	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C225	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C231	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C234	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C238	0CK224DF56A	220000PF 2012 16V 10% R/TP X7R
C239	0CK224DF56A	220000PF 2012 16V 10% R/TP X7R
C240	0CK224DF56A	220000PF 2012 16V 10% R/TP X7R
C241	0CK224DF56A	220000PF 2012 16V 10% R/TP X7R
C256	0CE107SF6DC	100UF MVG 16V M SMD R/TP
C260	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C262	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C264	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C267	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C270	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C274	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C277	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C279	0CE476SF6DC	47UF MVG 16V M SMD R/TP

LOCA. NO	PART NO	DESCRIPTION
C286	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C299	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C300	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C302	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C304	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C311	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C312	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C313	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C314	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C315	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C316	181-064P	10UF 0 16V K CA TP 5
C317	0CE106SF6DC	10UF MVG 16V 20% R/TP(SMD) SMD
C323	0CE107VF6DC	100UF MV 16V 20% R/TP(SMD) SMD
C325	0CE107VF6DC	100UF MV 16V 20% R/TP(SMD) SMD
C501	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C510	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C523	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C525	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C527	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C529	0CE107SF6DC	100UF MVG 16V M SMD R/TP
C531	0CE107SF6DC	100UF MVG 16V M SMD R/TP
C533	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C535	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C537	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C540	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C542	0CE107SF6DC	100UF MVG 16V M SMD R/TP
C576	0CE107SF6DC	100UF MVG 16V M SMD R/TP
C586	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C588	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C590	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C594	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C598	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C602	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C605	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C612	0CE106SF6DC	10UF MVG 16V 20% R/TP(SMD) SMD
C615	0CE476VH6DC	47UF MV 25V 20% R/TP(SMD) SMD
C621	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C630	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C631	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C634	0CE106SF6DC	10UF MVG 16V 20% R/TP(SMD) SMD
C639	0CE476VH6DC	47UF MV 25V 20% R/TP(SMD) SMD
C642	0CE476VH6DC	47UF MV 25V 20% R/TP(SMD) SMD
C646	0CE476VH6DC	47UF MV 25V 20% R/TP(SMD) SMD
C654	0CE476VH6DC	47UF MV 25V 20% R/TP(SMD) SMD
C661	0CE476VH6DC	47UF MV 25V 20% R/TP(SMD) SMD
C669	0CE476VH6DC	47UF MV 25V 20% R/TP(SMD) SMD
C676	181-007F	MPE ECQ-V1H224JL3(TR), 50V 0.2
C677	181-007F	MPE ECQ-V1H224JL3(TR), 50V 0.2
C678	181-007F	MPE ECQ-V1H224JL3(TR), 50V 0.2
C679	181-007F	MPE ECQ-V1H224JL3(TR), 50V 0.2
C682	0CE105SK6DC	1UF MVG 50V M SMD R/TP
C683	0CE105SK6DC	1UF MVG 50V M SMD R/TP

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RN : Metal Film
RF : Fusible

LOCA. NO	PART NO	DESCRIPTION
C685	0CE476VH6DC	47UF MV 25V 20% R/TP(SMD) SMD
C687	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C689	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C690	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C691	0CE335SK6DC	3.3UF MVG 50V 20% SMD R/TP
C701	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C703	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C706	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C755	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C756	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C758	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C761	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C762	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C764	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C766	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C773	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C774	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C775	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C776	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C801	0CE476VH6DC	47UF MV 25V 20% R/TP(SMD) SMD
C803	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C805	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C809	0CE477BJ618	470UF KME TYPE 35V 20% FL TP 5
C813	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C815	0CK224DF56A	220000PF 2012 16V 10% R/TP X7R
C818	0CE106BF618	10UF KME 16V M FL TP5
C821	0CE108DD618	1000UF STD 10V M FL TP5
C826	0CE477DD618	470UF STD 10V M FL TP5
C830	0CK224DF56A	220000PF 2012 16V 10% R/TP X7R
C831	0CE476SF6DC	47UF MVG 16V M SMD R/TP
C836	0CE106BF618	10UF KME 16V M FL TP5
C838	0CE108DD618	1000UF STD 10V M FL TP5
C843	0CE477DD618	470UF STD 10V M FL TP5
C845	0CE477BJ618	470UF KME TYPE 35V 20% FL TP 5
C848	0CE476SF6DC	47UF MVG 16V M SMD R/TP
COIL & TRANSFORMER		
L210	0LA0101K119	INDUCTOR,1.0UH K
L302	0LA0472K119	INDUCTOR,47UH K
L303	0LA0101K119	INDUCTOR,1.0UH K
L304	0LA0102K119	INDUCTOR,10UH K
L612	6140VR0005A	COIL,SLF7045T-150M1R1 TDK 15UF
L613	6140VR0005A	COIL,SLF7045T-150M1R1 TDK 15UF
L614	6140VR0005A	COIL,SLF7045T-150M1R1 TDK 15UF
L615	6140VR0005A	COIL,SLF7045T-150M1R1 TDK 15UF
L813	6140VR0001C	COIL,SB1260-470 GET 47UH
L814	6140VR0001C	COIL,SB1260-470 GET 47UH
L815	6140VR0001C	COIL,SB1260-470 GET 47UH
L816	6140VR0001C	COIL,SB1260-470 GET 47UH
JACK		
P101	6612J00010A	JACK,RCA PPJ128A-1 A/V 2P MONO

LOCA. NO	PART NO	DESCRIPTION
P102	380-363K	JACK,DIN PJ6046G H=8.0 W/O S/W
P103	6612J00010B	JACK,RCA PPJ128A-2 A/V 3P WITH
P104	6612TAH002A	JACK,PHONE DC-001 UNITOP DC-001
P501	6612VJH018A	JACK,RCA PJ6058C-A A/V 2P MON
P502	6612JH003EA	JACK,RCA UST-AG-013 UGCOM 2P SPK TERMIN
P507	6612BBBHN6A	JACK,DIN 440062-1 AMP DVI INTERACED
RESISTOR		
AR001	0RRZVTA001D	22 OHM 1 / 16 W 1608 5%
AR002	0RRZVTA001D	22 OHM 1 / 16 W 1608 5%
AR003	0RRZVTA001D	22 OHM 1 / 16 W 1608 5%
AR004	0RRZVTA001D	22 OHM 1 / 16 W 1608 5%
AR005	0RRZVTA001D	22 OHM 1 / 16 W 1608 5%
AR006	0RRZVTA001D	22 OHM 1 / 16 W 1608 5%
AR007	0RRZVTA001D	22 OHM 1 / 16 W 1608 5%
AR008	0RRZVTA001D	22 OHM 1 / 16 W 1608 5%
AR201	0RRZVTA001D	22 OHM 1 / 16 W 1608 5%
AR202	0RRZVTA001D	22 OHM 1 / 16 W 1608 5%
AR203	0RRZVTA001D	22 OHM 1 / 16 W 1608 5%
AR204	0RRZVTA001D	22 OHM 1 / 16 W 1608 5%
AR205	0RRZVTA001D	22 OHM 1 / 16 W 1608 5%
AR206	0RRZVTA001D	22 OHM 1 / 16 W 1608 5%
AR207	0RRZVTA001D	22 OHM 1 / 16 W 1608 5%
AR208	0RRZVTA001D	22 OHM 1 / 16 W 1608 5%
AR513	0RRZVTA001D	22 OHM 1 / 16 W 1608 5%
AR514	0RRZVTA001D	22 OHM 1 / 16 W 1608 5%
AR515	0RRZVTA001D	22 OHM 1 / 16 W 1608 5%
AR516	0RRZVTA001D	22 OHM 1 / 16 W 1608 5%
AR517	0RRZVTA001D	22 OHM 1 / 16 W 1608 5%
AR518	0RRZVTA001D	22 OHM 1 / 16 W 1608 5%
AR519	0RRZVTA001D	22 OHM 1 / 16 W 1608 5%
AR520	0RRZVTA001D	22 OHM 1 / 16 W 1608 5%
AR521	0RRZVTA001D	22 OHM 1 / 16 W 1608 5%
AR522	0RRZVTA001D	22 OHM 1 / 16 W 1608 5%
AR523	0RRZVTA001D	22 OHM 1 / 16 W 1608 5%
AR524	0RRZVTA001D	22 OHM 1 / 16 W 1608 5%
AR701	0RRZVTA001D	22 OHM 1 / 16 W 1608 5%
AR702	0RRZVTA001D	22 OHM 1 / 16 W 1608 5%
AR703	0RRZVTA001D	22 OHM 1 / 16 W 1608 5%
AR704	0RRZVTA001D	22 OHM 1 / 16 W 1608 5%
AR705	0RRZVTA001D	22 OHM 1 / 16 W 1608 5%
AR706	0RRZVTA001D	22 OHM 1 / 16 W 1608 5%
R501	0RF0111K607	1.1 OHM 2 W 5.00%
R502	0RF0111K607	1.1 OHM 2 W 5.00%
R503	0RF0111K607	1.1 OHM 2 W 5.00%
R504	0RF0111K607	1.1 OHM 2 W 5.00%
SWITCH		
SW01	140-315A	SWITCH,TACT SKHV17910B NON 12V
SW001	6600VR1004A	SWITCH,TACT SKHMPW 5P CHIP TACT NON
SW02	140-315A	SWITCH,TACT SKHV17910B NON 12V
SW03	140-315A	SWITCH,TACT SKHV17910B NON 12V

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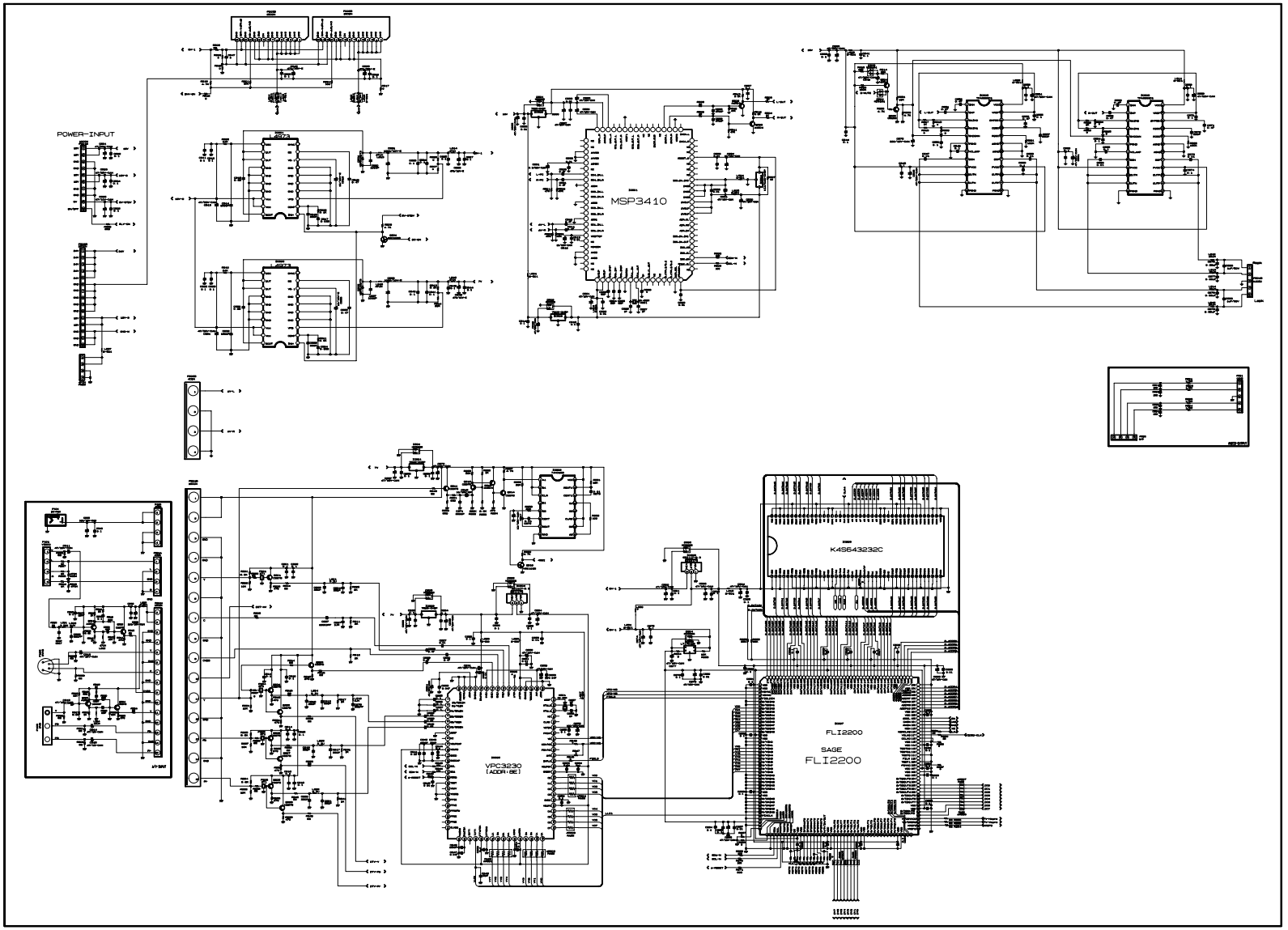
LOCA. NO	PART NO	DESCRIPTION
SW04	140-315A	SWITCH,TACT SKHV17910B NON 12V
SW05	140-315A	SWITCH,TACT SKHV17910B NON 12V
SW06	140-315A	SWITCH,TACT SKHV17910B NON 12V
SW07	140-315A	SWITCH,TACT SKHV17910B NON 12V
FILTER & CRYSTAL		
F201	166-F01D	FILTER,EMC DSN6NC51H271Q93A
F204	166-F01D	FILTER,EMC DSN6NC51H271Q93A
F205	166-F01D	FILTER,EMC DSN6NC51H271Q93A
F206	166-F01D	FILTER,EMC DSN6NC51H271Q93A
L206	6210TCE001G	FILTER,EMC HH-1M3216-501
L207	6210TCT002B	FILTER,EMC ACB2012M-300-T
L208	6210TCT002B	FILTER,EMC ACB2012M-300-T
L209	6210TCT002B	FILTER,EMC ACB2012M-300-T
L212	6210TCE001G	FILTER,EMC HH-1M3216-501
L231	6210TCE001G	FILTER,EMC HH-1M3216-501
L503	6210TCE001G	FILTER,EMC HH-1M3216-501
L504	6210TCE001G	FILTER,EMC HH-1M3216-501
L505	6210TCE001G	FILTER,EMC HH-1M3216-501
L506	6210TCE001G	FILTER,EMC HH-1M3216-501
L507	6210TCE001G	FILTER,EMC HH-1M3216-501
L511	6210VC0005A	FILTER,EMC BK2125 HS 750
L601	6210TCE001G	FILTER,EMC HH-1M3216-501
L603	6210TCE001G	FILTER,EMC HH-1M3216-501
L604	6210TCE001G	FILTER,EMC HH-1M3216-501
L605	6210TCE001G	FILTER,EMC HH-1M3216-501
L609	6210TCE001G	FILTER,EMC HH-1M3216-501
L611	6210TCE001G	FILTER,EMC HH-1M3216-501
L701	6210TCE001G	FILTER,EMC HH-1M3216-501
L703	6210TCE001G	FILTER,EMC HH-1M3216-501
L704	6210TCE001A	FILTER,EMC HB-1S2012-080JT
L705	6210TCE001G	FILTER,EMC HH-1M3216-501
L804	6210TCE001G	FILTER,EMC HH-1M3216-501
L805	6210TCE001G	FILTER,EMC HH-1M3216-501
L806	6210TCE001G	FILTER,EMC HH-1M3216-501
L810	6210TCE001G	FILTER,EMC HH-1M3216-501
L811	6210TCE001G	FILTER,EMC HH-1M3216-501
L812	6210TCE001G	FILTER,EMC HH-1M3216-501
X001	6212AB2015C	RESONATOR,CRYSTAL HC-49/SM4H 25MHZ +/- 50
X201	6202VDT002E	RESONATOR,CRYSTAL SX-1SMD 20250000H
X601	6202VDT002H	RESONATOR,CRYSTAL SX-1 18.432MHZ
MISCELLANEOUS		
P02	6726VH0001A	REMOTE CONTROLLER RECEIVER,38KHZ
P006	6630VGA004B	CONNECTOR,D-SUB 9P 2.77MM FOR
P505	6630VGA001C	CONNECTOR,D-SUB 15PIN 2.29MM
ACCESSORIES		
A1	3828VA0338J	MANUAL,OWNERS MF02HA MW-30LZ10 ZENITH
A2	6710V00092T	REMOTE CONTROLLER,MF-02HA W/O TXT
A3	6410VUH003A	POWER CORD,PS204-001 VOLEX UL/C
A4	174-208D	CORD,A/V(3P,3.0M)

LOCA. NO	PART NO	DESCRIPTION
A5	6850V00001A	CABLE,FLAT 1566075-1 DVI A/D TO A/D 2000M
A6	6851V00001F	CABLE ASSEMBLY,3M RCA-PLUG(2P) TO STEREO 118
A7	6866VA9001A	CONNECTOR,2990-9C,AT,L1830,COOL GRAY 3C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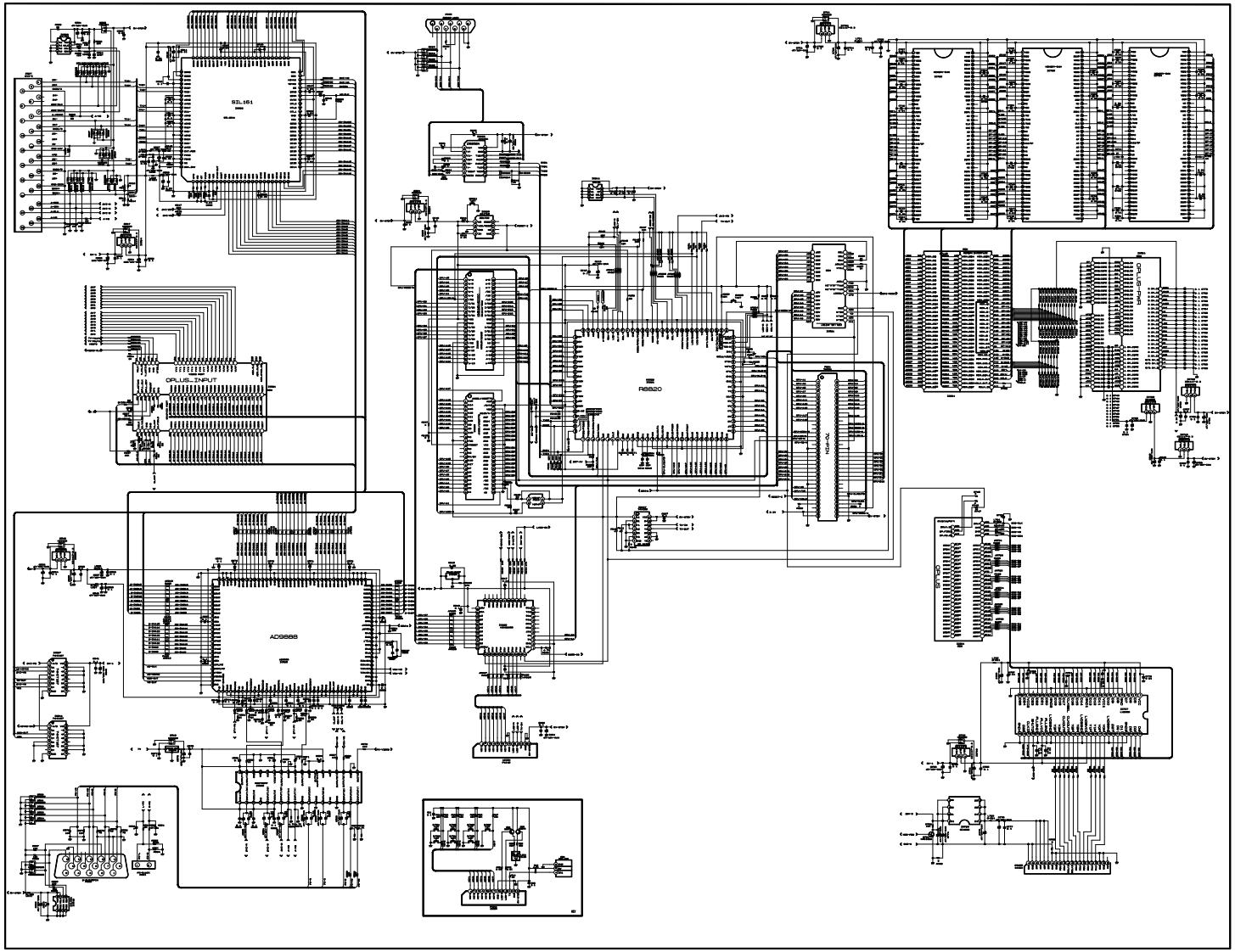
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